

Claims

We claim,

1. A method of generating embryonic stem (ES) cell colonies exhibiting drug resistance to a selection agent, comprising introducing into the ES cells an exogenous DNA comprising a ubiquitin promoter, and a drug resistance gene under control of the ubiquitin promoter.
2. The method of claim 1, wherein the ES cells are mammalian ES cells.
3. The method of claim 2, wherein the mammalian ES cells are mouse ES cells.
4. The method of claim 1, wherein the drug resistance gene encodes neomycin phosphotransferase.
5. The method of claim 1, wherein the drug resistance gene encodes hygromycin phosphotransferase.
6. The method of claim 1, wherein the drug resistance gene encodes puromycin acetyl transferase.
7. The method of claim 1, wherein the ubiquitin promoter is the ubiquitin C promoter.
8. The method of claim 7, wherein the ubiquitin promoter is a human, mouse, rat, or bacterial ubiquitin promoter.
9. A method of targeting a targeting vector into ES cells, comprising introducing into the ES cells a targeting vector comprising a drug resistance gene under control of a ubiquitin promoter.
10. The method of claim 9, wherein the ES cells are mammalian ES cells.
11. The method of claim 10, wherein the mammalian ES cells are mouse ES cells.
12. The method of claim 9, wherein the drug resistance gene encodes neomycin phosphotransferase.
13. The method of claim 9, wherein the drug resistance gene encodes hygromycin phosphotransferase.

14. The method of claim 9, wherein the drug resistance gene encodes puromycin acetyl transferase.
15. The method of claim 9, wherein the ubiquitin promoter is the ubiquitin C promoter.
16. The method of claim 15, wherein the ubiquitin promoter is a human, mouse, rat, or bacterial ubiquitin promoter.